

**EXECUTIVE SUMMARY**  
**HEALTH PROMOTION AND PREVENTION INITIATIVES (HPPI) PROGRAM**  
**TOBACCO CESSATION, FY97 – FY06**

**PURPOSE**

To summarize Health Promotion and Prevention Initiatives (HPPI) Program tobacco cessation initiative funding and outcomes

**BACKGROUND**

The purpose of the HPPI Program is to enhance force readiness through health promotion. The HPPI Program uses a competitive process to fund unique and innovative projects that demonstrate potential as best approaches to health promotion and preventive medicine in the US Army. These best approaches are recommended for proliferation across the Army or targeted toward specific Military Health Care System populations.

Since 1997, the US Army Center for Health Promotion and Preventive Medicine (USACHPPM) has developed, refined, and managed a program of HPPI initiatives for the US Army Medical Department (AMEDD), with funds made available from the Office of the Assistant Secretary of Defense for Health Affairs (OASD HA).

This executive summary only includes HPPI-funded tobacco cessation initiatives; the summary does not discuss other USACHPPM, AMEDD, or Department of Defense tobacco cessation efforts.

**FUNDING SUMMARY**

Eighteen different tobacco cessation initiatives\* have received a total of \$545,900 in HPPI Program funds since FY97. A summary of funding awards for tobacco cessation is shown in Table 1.

<b>Table 1. HPPI tobacco cessation funding by fiscal year, FY97 - FY06</b>					
<b>FY97</b>	<b>FY98</b>	<b>FY99</b>	<b>FY00</b>	<b>FY01</b>	<b>FY02</b>
\$122,395	\$62,000	\$118,800	\$28,705	\$75,000	\$25,000
4	3	4	1	3	1

<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>Total</b>
\$25,000	\$32,000	\$32,000	\$25,000	\$545,900
1	2	2	1	22*

*\*note: some initiatives have been funded more than once*

**OUTCOMES**

The outcomes from HPPI tobacco cessation initiatives include program implementation resources and military tobacco cessation quit rate data.

Program implementation resources developed from HPPI projects include:

- USACHPPM Tobacco Cessation Program: a six-week program based on the HPPI project at Fort Knox, Kentucky. Other Army installations that have implemented this program include Fort Jackson and Fort Polk.
- Tobacco Cessation Provider Competency Course: a self-study course based on materials used at Fort Hood, Texas; designed to train health care providers to prescribe nicotine replacement therapy medication.
- Technical report – Tobacco cessation program comparison: program content, length, quit rate data, and participant satisfaction was compared for three tobacco cessation programs implemented at a single Army installation.
- Tobacco Use among Trainees: briefing slides that include Army policy regarding tobacco use, the impact of tobacco use on Soldier readiness, and health and financial impacts of tobacco use.

Outcomes from tobacco cessation HPPI projects have provided the following quit rate data for military populations:

- Fort Knox Tobacco Cessation Program average quit rate since program inception is 47%\* at 12-month follow-up.
- American Cancer Society Fresh Start Program quit rate is 42%\* at 3-month follow-up (as implemented at Fort Polk).
- American Lung Association Freedom from Smoking quit rate is 40%\* at 3-month follow-up (as implemented at Fort Polk).
- Fort Bragg Tobacco Cessation Program (based on the American Cancer Society program) quit rate is 46%\* at 12-month follow-up.

\*Loss to follow-up is a significant challenge when determining outcomes for any military health promotion initiative; these quit rates do not reflect loss to follow-up. Quit rates were calculated by dividing the number of program graduates still not using tobacco at the specified time period by the number of graduates contacted.

The USACHPPM Tobacco Cessation Program and the Tobacco Cessation Provider Competency Course are also among the materials most frequently downloaded from the USACHPPM Directorate of Health Promotion and Wellness web site. These materials were downloaded more than 9,100 times during the second quarter of FY06.

In addition, requests to use the USACHPPM Tobacco Cessation Program and the Tobacco Cessation Provider Competency Course have been received from the Navy, state government, two universities, and several private companies.

## FINANCIAL IMPACT

It is impossible to determine the full economic impact of HPPI tobacco cessation initiatives. However, it is possible to estimate the impact using data from the Fort Knox Tobacco Cessation Program and data from the Centers for Disease Control and Prevention (CDC).

Table 2 is a summary of tobacco cessation program implementation costs and health care and lost productivity costs that are avoided as a result of successful tobacco cessation. This table assumes a relapse rate of 23% for year two program graduates, and calculates program costs, and benefits accrued for this year two of sustained tobacco cessation. This cursory economic impact summary does not extrapolate benefits beyond year two of tobacco cessation. Neither does this evaluation include additional expenses such as personnel costs for program implementation or other confounding health issues which might also affect the overall impact.

**Table 2. Tobacco cessation program costs and costs avoided – Year 2**

<b>Costs</b>	Cumulative tobacco-free graduates at year 1*	2368
	Assume 23% relapse rate at year 2**	1823
	Program costs (\$318-\$719)***; assume highest costs	\$719
	Program costs multiplied by adjusted number of graduates	<b>\$1.3 million</b>
<b>Costs avoided</b>	Health care and lost productivity costs for each smoker****	\$3,400
	Costs avoided for adjusted number of graduates	<b>\$6.2 million</b>
<b>Net impact</b>	Costs avoided less program costs	<b>\$4.9 million</b>

\*Fort Knox Tobacco Cessation Program cumulative total, FY96 through FY06

\*\*Very little research has been done to determine relapse rates beyond year 1; some research suggests the rate at year 2 to be 23%

\*\*\*Dependent on patient age, use of Zyban, and amount of Nicotine Replacement Therapy required.

\*\*\*\*As stated by CDC

The net impact stated above is conservative because it only reflects costs avoided for a second year of sustained tobacco cessation and has not been prorated to reflect longer term economic impacts for graduates of this program since FY96. This net impact is also conservative in that participants in other HPPI tobacco cessation initiatives have not been included in this calculation.

#### FURTHER STUDY NEEDED

Evaluation of HPPI tobacco cessation initiatives has identified the following questions for further study. Future Requests for HPPI Proposals will target initiatives that can explore answers to these questions.

1. Does group support for Soldiers have to be face-to-face, or would an online support group work equally as well?
2. Do the same critical success factors for standard tobacco cessation programs (i.e., support and pharmacotherapy) apply to Soldiers down range or Soldiers returning from theater?
3. What is the optimal time of day to offer Soldiers tobacco cessation classes in order to minimize program drop-outs? (i.e., would tobacco cessation classes held during Physical Training once a week have lower drop-out rates?)
4. Are current tobacco cessation programs equally effective for smokeless tobacco users?

5. Would it be feasible or practical to tailor Army tobacco cessation programs to population characteristics such as level of tobacco use, rank/grade, or other demographic characteristics?  
*(Other private sector tobacco cessation program comparisons have been able to identify effective tobacco cessation delivery methods based on demographics, tobacco use level, and quit history of program participants; more study is needed for delivery methods tailored in the same way for military populations. Also, additional study is needed regarding alternative delivery of tobacco cessation to military populations, such as telephone quit lines, interactive web sites, Military Treatment Facility programs, and unit level programs.)*
6. How could Army tobacco cessation programs be modified to address Soldier-specific relapse issues (like weight gain and deployment)?
7. What stress management tools and coping skills are most effective for Soldiers in maintaining tobacco-free status and also in preventing tobacco initiation?
8. How is tobacco cessation success affected by the proportion of Soldiers within the same unit attempting to quit tobacco at the same time?

## REFERENCES

USACHPPM Tobacco Cessation Program

<http://chppm-www.apgea.army.mil/dhpw/Population/TobaccoCessation.aspx>

Tobacco Cessation Provider Competency Course

<http://chppm-www.apgea.army.mil/dhpw/Population/TobaccoCessation.aspx>

Technical report: Tobacco cessation program comparison

<http://chppm-www.apgea.army.mil/dhpw/Population/TobaccoCessationProgramComparison.pdf>

Tobacco Use Among Trainees: Command brief

<http://chppm-www.apgea.army.mil/dhpw/Population/CommanderTobacco%20Brief.ppt>

Tobacco Use Among Trainees: Trainee brief

<http://chppm-www.apgea.army.mil/dhpw/Population/TraineeTobaccoBriefRevised.ppt>